

FIGS. 7A-7D. Provides the nucleotide sequence corresponding to transcript 10 (see figure 1) (SEQ ID NO: 4), together with the predicted amino acid sequence (SEQ ID NO: 11) of the encoded protein. Nucleotides 1-96 correspond to exon 1d; nucleotides 97-244 correspond to exon 2; nucleotides 245-396 correspond to intronic sequence immediately 3' to exon 2; nucleotides 397-1534 correspond to exons 3 to the stop codon in exon 9 (or nucleotides 146-1283 of the hVDR cDNA (1)).

Replace the paragraph beginning at page 10, line 1 with the following:

FIGS. 8A-8D. Provides the nucleotide sequence corresponding to transcript 11 (see figure 1) (SEQ ID NO: 7), together with the predicted amino acid sequence (SEQ ID NO: 12) of the encoded protein. Nucleotides 1-207 correspond to exon 1f; nucleotides 208-1574 correspond to exon 1c to the stop codon in exon 9 (or nucleotides -83-1283 of the hVDR cDNA (1)).

IN THE CLAIMS

Replace the claims with the clean copy of their correspondingly numbered claims below.

Add new claims 26-29.

1. **(Amended)** An isolated polynucleotide molecule encoding a human vitamin D receptor (hVDR) isoform, said polynucleotide molecule comprising i) a nucleotide sequence having 95% or more sequence identity to a nucleotide sequence of exon 1d of the human VDR gene, or fragment thereof, or ii) a nucleotide sequence encoding an amino acid sequence of exon 1d or fragment thereof.

2. **(Amended)** A polynucleotide molecule according to claim 1, wherein said nucleotide sequence further includes

- i) a nucleotide sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence of, exon 1b or fragment thereof;
- ii) a nucleotide sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence of, exon 1c or fragment thereof; or
- iii) a nucleotide sequence having i) and ii).

3. **(Amended)** A polynucleotide molecule according to claim 1, wherein the nucleotide sequence includes:

(i) a sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence of, of exons 1d, 1c and 2-9 and encodes a VDR isoform of approximately 477 amino acids,

(ii) a sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence of, of exons 1d and 2-9 and encodes a VDR isoform of approximately 450 amino acids, or

(iii) a sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence of, of exons 1d and 2-9 and further includes a 152bp intronic sequence and encodes a truncated VDR isoform of approximately 72 amino acids.

4. **(Amended)** A polynucleotide molecule according to claim 1, wherein the polynucleotide comprises a nucleotide sequence having 95% or more sequence identity to a nucleotide sequence of, or encoding an amino acid sequence encoded by, SEQ ID NO:2, SEQ ID NO:3 or SEQ ID NO:4.

9. A plasmid or expression vector including a polynucleotide molecule according to claim 1.

10. A host cell transformed with a polynucleotide molecule according to claim 1 or a plasmid or expression vector according to claim 9.

11. A host cell according to claim 10, wherein the cell is a mammalian cell.

12. A host cell according to claim 10, wherein the cell is a NIH 3T3 or COS 7 cell.

13. **(Amended)** A method of producing a VDR or VDR isoform polypeptide, or a fragment thereof, comprising a host cell of claim 10 under conditions enabling the expression of the polynucleotide molecule and, optionally, recovering the VDR or VDR isoform polypeptide.

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C⁶ 14. **(Amended)** A method according to claim 13, wherein the VDR or VDR isoform polypeptide, or a fragment thereof, is expressed onto the host cell membrane or other sub-cellular compartment.

21. **(Amended)** An isolated polynucleotide molecule comprising a nucleotide sequence showing greater than 75% sequence identity to
GTTTCCTTCTTCTGTCGGGGCGCCTTGGCATGGAGTGGAGGAATAAGAAA
AGGAGCGATTGGCTGTCGATGGTGCTCAGAACTGCTGGAGTGGAGG3' (SEQ ID NO:1)

22. **(Amended)** An isolated polynucleotide molecule comprising a nucleotide sequence showing greater than 85% sequence identity to
GTTTCCTTCTTCTGTCGGGGCGCCTTGGCATGGAGTGGAGGAATAAGAAA
AGGAGCGATTGGCTGTCGATGGTGCTCAGAACTGCTGGAGTGGAGG3' (SEQ ID NO:1)

C⁷ 23. **(Amended)** An isolated polynucleotide molecule comprising a nucleotide sequence showing greater than 95% sequence identity to
GTTTCCTTCTTCTGTCGGGGCGCCTTGGCATGGAGTGGAGGAATAAGAAA
AGGAGCGATTGGCTGTCGATGGTGCTCAGAACTGCTGGAGTGGAGG3' (SEQ ID NO:1)

24. **(Amended)** An isolated polynucleotide molecule comprising a nucleotide sequence of
GTTTCCTTCTTCTGTCGGGGCGCCTTGGCATGGAGTGGAGGAATAAGAAA
AGGAGCGATTGGCTGTCGATGGTGCTCAGAACTGCTGGAGTGGAGG3' (SEQ ID NO:1)

26. **(New)** An isolated polynucleotide having a sequence that is complementary to the sequence of the polynucleotide of claim 1.

C⁸ 27. **(New)** An isolated polynucleotide molecule encoding a human vitamin D receptor (hVDR) isoform, said polynucleotide molecule comprising a nucleotide sequence having greater than 75% sequence identity to a nucleotide sequence of nucleotide residues 30-95 of SEQ ID NO:1.

28. **(New)** An isolated polynucleotide molecule encoding a human vitamin D receptor (hVDR) isoform, said polynucleotide molecule comprising a nucleotide sequence encoding the amino acid sequence MEWRNKKRSDWLSMVLRTAGVE.